--The present invention is a method and apparatus for allocating real-time audio data from a plurality of audio channels in a system having a first processor and a second processor. Memory banks are provided where each memory bank is accessible to the first and second processors. Subsets of the audio data are stored in the memory banks. These subsets correspond to different groups of audio channels.--

IN THE CLAIMS

1. (Amended) A method for allocating real-time audio data from [N] a first plurality of audio channels in a system having a first processor and a second processor, the method comprising [the steps of]:

providing [P] a second plurality of memory banks, each memory bank being accessible to the first and second processors for operations selected from the group comprising read and write operations; and

storing [P] subsets of said audio data in [P] the second plurality of memory banks, [respectively,] the subsets corresponding to [P] different groups of audio channels.

2. (Amended) The method of claim 1, [prior to the step of storing,] ~~further~~ [comprises a step of] comprising ~~selecting~~ said memory banks for access by one of the first and second processors.

5. (Amended) A system having first and second buses for processing real-time audio data from [N] a first plurality of audio channels, the system comprising:

a first processor and a second processor coupled to said first and second busses, respectively; and

[P] a second plurality of memory banks coupled to said first and second buses for storing said audio data, said [P] second plurality of memory banks being accessible to the first and second processors for operations selected from the group comprising read and write operations, said [P] second plurality of memory banks storing [P] subsets of audio data, [respectively,] said [P] subsets corresponding to [P] different groups of audio channels.

Please add the following claims:

10. (new) The method of claim 1, wherein storing further comprises interleaving the subsets of data.

11. (new) The system as set forth in claim 5, wherein the subsets are stored in the memory banks in an interleaving manner.

12. (new) The method of claim 1, wherein storing comprises storing one of the subsets of audio data in one of the memory banks, said method further comprising reading stored audio data from a second of the memory banks.

13. (new) The method as set forth in claim 1, wherein the first processor performs a read operation on a first memory bank of the plurality of memory banks and the second processor performs a write operation on a second memory bank of the plurality of memory banks.